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L2: Entry 10 of 67

File: JPAB

Oct 7, 1997

PUB-NO: JP409263573A  
DOCUMENT-IDENTIFIER: JP 09263573 A  
TITLE: PRODUCTION OF THEANINE

PUBN-DATE: October 7, 1997

## INVENTOR-INFORMATION:

NAME

KOBAYASHI, SHOICHI

TSUZUKI, WAKAKO

YAMAMOTO, KAZUKI

TSUSHIDA, TOUJIROU

ISHIZUKA, TADAYOSHI

HIWATARI, KAZUHISA

MORIYA, KAZUHITO

KANO, SADA0

## ASSIGNEE-INFORMATION:

NAME

NATL FOOD RES INST

HOKKAIDO TOGYO KK

COUNTRY

N/A

N/A

APPL-NO: JP08099467  
APPL-DATE: March 29, 1996

INT-CL (IPC): C07C 237/06; C07C 231/08; C07C 231/14

## ABSTRACT:

PROBLEM TO BE SOLVED: To simply and efficiently obtain theanine as a main component of flavor of green tea, useful for a nutritious food, taste improvement, etc., by reacting pyroglutamic acid, sodium pyroglutamate, etc., with an ethylamine under an alkali condition.

SOLUTION: Pyroglutamic acid and/or sodium pyroglutamate is reacted with a solution of an ethylamine hydrochloride and/or ethylamine under an alkali condition of pH 10-13 in the presence of cyclodextrin of 1-10 times as much as pyroglutamic acid and/or sodium pyroglutamate etc., with an ethylamine in an aqueous medium in a closed container at 65°C for two days under stirring to simply and efficiently give the subjective theanine (L- $\gamma$ - glutamylethyamide) as a main component of flavor of green tea, useful for producing a nutritious food by mixing with various foods, taste improvement, etc.

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Baltimore Maryland. pp. 201-219. No publishing date is available.

ART-UNIT: 132

PRIMARY-EXAMINER: Pratt; Helen

ATTY-AGENT-FIRM: Lowe, Price, LeBlanc & Becker

ABSTRACT:

The caffeine stimulation inhibitor that inhibits stimulation by combining the use of theanine extracted from tea leaves and/or a substance having theanine for its major active ingredient which is produced by extracting tea leaves with a solvent such as water, hot water or ethanol, chemical synthesis, microbial fermentation or plant tissue culturing. These active ingredients are able to inhibit the stimulatory action of caffeine without degrading the quality, such as the flavor and aroma, of caffeine-containing beverages and foods, allowing persons hypersensitive to caffeine to consume caffeine-containing beverages and foods without worry over its effects.

11 Claims, 2 Drawing figures

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File: JPAB

Dec 9, 1997

PUB-NO: JP409313129A  
DOCUMENT-IDENTIFIER: JP 09313129 A  
TITLE: FLAVOR IMPROVING COMPOSITION

PUBN-DATE: December 9, 1997

## INVENTOR-INFORMATION:

NAME

ITOU, KANARI

NAGATO, YUKIKO

## ASSIGNEE-INFORMATION:

NAME

TAIYO KAGAKU CO LTD

COUNTRY

N/A

APPL-NO: JP08157541

APPL-DATE: May 28, 1996

INT-CL (IPC): A23L 1/22; A23L 1/015

## ABSTRACT:

PROBLEM TO BE SOLVED: To obtain a flavor improving composition useful for a refreshing beverage, a functional beverage, an alcoholic beverage, a health food, a medicine, etc., excellent in safety and palatability, having improving effects on bitterness, acidity and salty taste, containing a theanine.

SOLUTION: This flavor improving composition comprises a theanine such as Ltheanine which is a glutamic acid derivative contained in tea leaves and is a main component of the taste of tea. A product required to improve taste is favorably mixed with 0.001-5wt.%, preferably 0.001-0.5wt.% of a theanine.

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File: JPAB

Jan 14, 1997

PUB-NO: JP409012454A  
DOCUMENT-IDENTIFIER: JP 09012454 A  
TITLE: THEANINE-CONTAINING COMPOSITION

PUBN-DATE: January 14, 1997

## INVENTOR-INFORMATION:

NAME

ITOU, KANAMICHI

AOI, NOBUYUKI

SUGIMOTO, SUKEO

## ASSIGNEE-INFORMATION:

NAME

TAIYO KAGAKU CO LTD

COUNTRY

N/A

APPL-NO: JP07184923

APPL-DATE: June 27, 1995

INT-CL (IPC): A61K 31/195; A61K 31/195; A61K 35/78

## ABSTRACT:

PURPOSE: To obtain a composition which has effects of generating the  $\alpha$ -waves and sustaining them and the effect of increasing the learning efficiency.

CONSTITUTION: This composition contains, as an active ingredient, theanine, one of amino acids which is included in green tea in a large amount and a major component of deliciousness. Theanine is used, as it is, or by adding to food products, dried products, refreshing beverage and medicines. In the case that the theanine is used as a composition enhancing the development of  $\alpha$ -waves and a composition improving learning efficiency, the dose of theanine is 0.3-300mg/kg body weight, preferably 0.3-30mg/kg body weight. The theanine is prepared by extraction of tea leaves or by allowing glutaminase to act on a mixture of glutamine with ethylamine. Simple dietary intake of theanine generates and sustains the  $\alpha$ -waves deeply relating to mental relax and increases learning efficiency.

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File: JPAB

Apr 30, 1996

PUB-NO: JP408109104A

DOCUMENT-IDENTIFIER: JP 08109104 A

TITLE: ADJUSTMENT FOR NUTRITION AND PHYSIOLOGICAL ACTION IN TEA TREES AND  
PRODUCTION OF ACCELERATOR OF L-THEANINE FORMATION

PUBN-DATE: April 30, 1996

## INVENTOR-INFORMATION:

NAME

YOKOYAMA, TSUNETAKA

## ASSIGNEE-INFORMATION:

NAME

YOKOYAMA TSUNETAKA

COUNTRY

N/A

APPL-NO: JP06281085

APPL-DATE: October 7, 1994

INT-CL (IPC): A01N 33/04; A01N 37/44; A01N 43/38; A01N 43/40; A01N 43/90; A01N  
63/00

## ABSTRACT:

PURPOSE: To increase the deliciousness of tea with the enhancement of living body function as a food product and increase tea leave production with the quality improved.

CONSTITUTION: Ethylamine hydrochloride, phytohormones, auxin (indoleacetic acid or indolebutyric acid), cytokinin (kinetin), vitamins, amino acids, nucleic acids, minerals (iron or zinc) are mixed and the mixture is watered or sprayed to improve the quality of tea.

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